

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

Claims 1-8 (cancelled)

Claim 9 (new): Regulating apparatus for a hydraulic system comprising at least one valve controlling a consumer, the apparatus comprising:

a job computer;

a bus connected to the job computer and each said valve;

at least one analog sensor producing a signal for controlling or regulating the consumer; and

an autonomous controlling and regulating element arranged between the bus and each said valve, each said element comprising a bus interface connected to the bus, a microcontroller connected to the bus interface and to the valve, and at least one analog-to-digital converter which is connected to the microcontroller and which can be connected to at least one analog sensor.

Claim 10 (new): The regulating apparatus of claim 9 wherein the controlling and regulating unit is structurally combined with the valve.

Claim 11 (new): The regulating apparatus of claim 10 wherein each said valve comprises a plug-in unit by which the controlling and regulating element can be connected to the bus and to the sensors and to a power supply.

Claim 12 (new): The regulating apparatus of claim 11 wherein each said plug-in unit comprises two identical plug-in configurations, each said configuration comprising a connection for the bus, the power supply, and at least one sensor.

Claim 13 (new): The regulating apparatus of claim 12 wherein each said connection comprises six contacts, two of said contacts serving for connection to at least one analog sensor.

Claim 14 (new): The regulating apparatus of claim 13 wherein said two of said contacts can be connected to a single two-conductor analog sensor.

Claim 15 (new): The regulating apparatus of claim 13 wherein said two of said contacts can be connected to two said analog sensors which are also connected to ground.

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Claim 16 (new): The regulating apparatus of claim 12 wherein said two of said contacts can be connected to an analog transmitter.